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10/772,518	02/05/2004	Robert E. Dye	5150-38605	5410
Jeffrey C. Hoo			EXAM	
	od, Kivlin, Kowert & Goet	CHEN, QING		
P.O. Box 398 Austin, TX 78767			ART UNIT	PAPER NUMBER
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SHORTENED STATUTOR	RY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE	
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Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

	Application No.	Applicant(s)					
	10/772,518	DYE ET AL.					
Office Action Summary	Examiner	Art Unit					
	Qing Chen	2191	,				
The MAILING DATE of this communication ap Period for Reply	pears on the cover sheet wit	h the correspondence ac	ldress				
A SHORTENED STATUTORY PERIOD FOR REPL WHICHEVER IS LONGER, FROM THE MAILING E - Extensions of time may be available under the provisions of 37 CFR 1. after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period - Failure to reply within the set or extended period for reply will, by statut Any reply received by the Office later than three months after the mailin earned patent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMMUNIC 136(a). In no event, however, may a re- will apply and will expire SIX (6) MONT te, cause the application to become ABA	ATION. ply be timely filed THS from the mailing date of this candoned (35 U.S.C. § 133).					
Status							
1)⊠ Responsive to communication(s) filed on 05 F	February 2004.						
·— ·	s action is non-final.						
,	,						
closed in accordance with the practice under		·					
Disposition of Claims							
4)⊠ Claim(s) <u>1-58</u> is/are pending in the application	٦.						
4a) Of the above claim(s) is/are withdrawn from consideration.							
5) Claim(s) is/are allowed.							
6)⊠ Claim(s) <u>1-58</u> is/are rejected.							
7) Claim(s) is/are objected to.	$\underline{}$						
8) Claim(s) are subject to restriction and/	or election requirement.						
Application Papers							
9)⊠ The specification is objected to by the Examin	er.						
10)⊠ The drawing(s) filed on <u>05 February 2004</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner.							
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).							
11)⊠ The oath or declaration is objected to by the E	xaminer. Note the attached	Office Action or form P	ΓΟ-152.				
Priority under 35 U.S.C. § 119			·				
12) ☐ Acknowledgment is made of a claim for foreign	n priority under 35 U.S.C. §	119(a)-(d) or (f).					
a) All b) Some * c) None of:							
1. Certified copies of the priority documen	its have been received.						
2. Certified copies of the priority documen	its have been received in Ap	pplication No					
3. Copies of the certified copies of the price	ority documents have been r	received in this National	Stage				
application from the International Burea	au (PCT Rule 17.2(a)).		•				
* See the attached detailed Office action for a list of the certified copies not received.							
	•						
Attachment(s)							
1) Notice of References Cited (PTO-892)	4) Interview Su	ummary (PTO-413)					
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) Paper No(s)/Mail Date.							
3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 20040205, 20060623.	5) Notice of int						
	, <u> </u>						

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DETAILED ACTION

1. This is the initial Office action based on the application filed on February 5, 2004.

2. Claims 1-58 are pending.

Information Disclosure Statement

3. The information disclosure statement filed on June 23, 2006 fails to comply with 37 CFR

1.98(a)(2), which requires a legible copy of each cited foreign patent document; each non-patent

literature publication or that portion which caused it to be listed; and all other information or that

portion which caused it to be listed. It has been placed in the application file, but the information

referred to therein has not been considered.

Oath/Declaration

4. The oath or declaration is defective. A new oath or declaration in compliance with 37

CFR 1.67(a) identifying this application by application number and filing date is required. See

MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because:

It does not identify the citizenship of the third inventor.

Specification

5. The disclosure is objected to because of the following informalities: the specification

lacks disclosure on Figures 9A and 10A.

Appropriate correction is required.

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Claim Objections

6. Claims 10, 46, 47, 53, and 58 are objected to because of the following informalities:

- Claim 10 contains a typographical error: "on of" should presumably read -- one of --.
- Claims 46 and 47 contain a typographical error: the word "and" should be added after the second-to-last limitation. Applicant is advised to make the correction in order to keep the claim language consistent throughout the claims.
- Claim 47 contains a typographical error: "wherein the system includes" should read
 -- wherein the system further includes --.
- Claim 53 contains a typographical error: "the system" should read -- the memory medium --.
- Claim 58 contains a typographical error: "wherein the program instructions are executable to" should read -- wherein the program instructions are further executable to --.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 22, 23, 41, 42, and 51-58 are rejected under 35 U.S.C. 112, second paragraph, as

being indefinite for failing to particularly point out and distinctly claim the subject matter which

applicant regards as the invention.

Claims 22 and 41 recite the limitation "the block diagram." There is insufficient

antecedent basis for this limitation in the claims. In the interest of compact prosecution, the

Examiner subsequently interprets this limitation as reading "a block diagram" for the purpose of

further examination.

Claim 23 depends on Claim 22 and, therefore, suffers the same deficiency as Claim 22.

Claim 42 depends on Claim 41 and, therefore, suffers the same deficiency as Claim 41.

Claims 51 and 58 recite the limitation "the network." There is insufficient antecedent

basis for this limitation in the claims. In the interest of compact prosecution, the Examiner

subsequently interprets this limitation as reading "a network" for the purpose of further

examination.

Claims 52-57 depend on Claim 51 and, therefore, suffer the same deficiency as Claim 51.

Claim 53 recites the limitations "the first computer" and "the second computer." There are insufficient antecedent basis for these limitations in the claim. In the interest of compact prosecution, the Examiner subsequently interprets these limitations as reading "a first computer" and "a second computer," respectively, for the purpose of further examination.

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

10. Claims 1-15, 18-20, 26-37, 45-56, and 58 are rejected under 35 U.S.C. 102(e) as being anticipated by Nichols et al. (US 6,138,150).

As per Claim 1, Nichols et al. disclose:

- receiving user input to the second computer, wherein said user input specifies the graphical program on the first computer (see Column 3: 7-12, "A user logs on to the Internet in a conventional manner by entering the address or uniform resource locator (URL) to connect to

the secure HTTP server at which point additional security such as a password will be required.

Upon entry of a correct password the Hardware Management Console (HMC) home-page will be displayed.");

- executing the graphical program on the first computer (see Column 4: 23-26, "... a computing facility 21 comprising, for example, a mainframe computer system 22, comprising one or more CPCs, is operated from a local Hardware Management Console (HMC) in a central control room 24.");
- providing information describing the user interface of the graphical program to the second computer during said executing (see Column 5: 59-62, "At Box 32, the server builds an HTML response for the browser, using the information from the internal message returned from Box 31 and the response is sent to the browser at box 34."); and
- displaying the user interface of the graphical program on the second computer after said providing; wherein the user interface facilitates interaction between a user of the second computer and the graphical program executing on the first computer (see Column 5: 62-65, "The browser displays the data from the server on a computer screen at box 35 whereupon the user can click on a displayed icon or action button to initiate another browser request to the server at box 36.").

As per Claim 2, the rejection of Claim 1 is incorporated; and Nichols et al. further disclose:

- wherein said providing information comprises the first computer providing information describing the user interface of the graphical program to the second computer during

said executing (see Column 5: 59-62, "At Box 32, the server builds an HTML response for the browser, using the information from the internal message returned from Box 31 and the response is sent to the browser at box 34.").

As per Claim 3, the rejection of Claim 1 is incorporated; and Nichols et al. further disclose:

- the first computer providing information describing the user interface of the graphical program to a plurality of computers during said executing (see Figure 2; Column 5: 59-62, "At Box 32, the server builds an HTML response for the browser, using the information from the internal message returned from Box 31 and the response is sent to the browser at box 34."); and
- each of the plurality of computers displaying the user interface of the graphical program after said providing (see Figure 2; Column 5: 62-65, "The browser displays the data from the server on a computer screen at box 35 whereupon the user can click on a displayed icon or action button to initiate another browser request to the server at box 36.").

As per Claim 4, the rejection of Claim 1 is incorporated; and Nichols et al. further disclose:

- wherein the graphical program executes to perform a measurement or automation function (see Figure 6).

As per Claim 5, the rejection of Claim 1 is incorporated; and Nichols et al. further disclose:

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- wherein the first computer and the second computer are connected over a network

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(see Figure 2); and

- wherein said providing comprises the first computer providing the information

describing the user interface of the graphical program over the network to the second computer

(see Figure 2; Column 5: 59-62, "At Box 32, the server builds an HTML response for the

browser, using the information from the internal message returned from Box 31 and the response

is sent to the browser at box 34.").

As per Claim 6, the rejection of Claim 5 is incorporated; and Nichols et al. further

disclose:

- the second computer connecting to the first computer over the network after said

receiving user input to the second computer (see Column 3: 7-12, "A user logs on to the Internet

in a conventional manner by entering the address or uniform resource locator (URL) to connect

to the secure HTTP server ... ");

- wherein said providing information is performed after said user input specifying the

graphical program on the first computer and after said connecting (see Column 5: 59-62, "At Box

32, the server builds an HTML response for the browser, using the information from the internal

message returned from Box 31 and the response is sent to the browser at box 34.").

As per Claim 7, the rejection of Claim 6 is incorporated; and Nichols et al. further

disclose:

- wherein the graphical program is already executing on the first computer when said connecting occurs (see Column 4: 23-26, "... a computing facility 21 comprising, for example, a mainframe computer system 22, comprising one or more CPCs, is operated from a local Hardware Management Console (HMC) in a central control room 24.").

As per Claim 8, the rejection of Claim 6 is incorporated; and Nichols et al. further disclose:

- the first computer launching execution of the graphical program in response to said connecting to the first computer (see Column 4: 23-26, "... a computing facility 21 comprising, for example, a mainframe computer system 22, comprising one or more CPCs, is operated from a local Hardware Management Console (HMC) in a central control room 24.").

As per Claim 9, the rejection of Claim 6 is incorporated; and Nichols et al. further disclose:

- wherein said receiving user input specifying the graphical program on the first computer comprises receiving a uniform resource locator (URL) (see Column 3: 7-12, "A user logs on to the Internet in a conventional manner by entering the address or uniform resource locator (URL) to connect to the secure HTTP server ...").

As per Claim 10, the rejection of Claim 9 is incorporated; and Nichols et al. further disclose:

- wherein the URL specifies one of: the first computer or the graphical program on the first computer (see Column 3: 7-12, "A user logs on to the Internet in a conventional manner by entering the address or uniform resource locator (URL) to connect to the secure HTTP server ...").

As per Claim 11, the rejection of Claim 5 is incorporated; and Nichols et al. further disclose:

- wherein the network is the Internet (see Figure 2: 8).

As per Claim 12, the rejection of Claim 5 is incorporated; and Nichols et al. further disclose:

- wherein said displaying comprises displaying the user interface of the graphical program on a web browser of the second computer (see Figure 2: 4; Column 4: 40-46, "The computer processors or devices to be controlled 22 are represented on the Web browser 4 via objects or icons where the background color of the icons are used to convey the operating state of the device.").

As per Claim 13, the rejection of Claim 1 is incorporated; and Nichols et al. further disclose:

- receiving user input to the graphical program via the displayed user interface on the second computer (see Column 6: 28-38, "Clicking on either one of these choices or icons prompts a security screen shown in FIG. 7 to be displayed."); and

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- providing the user input to the first computer (see Column 6: 28-38, "Upon entry of a correct user name and password, the secure server will build and send the appropriate response screen to the browser.");

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- wherein the graphical program executing on the first computer is operable to respond to the user input (see Column 6: 28-38, "Upon entry of a correct user name and password, the secure server will build and send the appropriate response screen to the browser.").

As per Claim 14, the rejection of Claim 1 is incorporated; and Nichols et al. further disclose:

- wherein the graphical program produces a first output state (see Column 6: 28-38, "Upon entry of a correct user name and password, the secure server will build and send the appropriate response screen to the browser."); and
- wherein said displaying the user interface includes displaying the user interface illustrating the first output state (see Figure 6; Column 6: 28-38, "Upon entry of a correct user name and password, the secure server will build and send the appropriate response screen to the browser.").

As per Claim 15, the rejection of Claim 14 is incorporated; and Nichols et al. further disclose:

- providing a user interface update indicating the second output state (see Column 6: 39-41, "Clicking on the "Hardware Management Console Application Tasks" of FIG. 6 causes the screen shown in FIG. 8 to be displayed."); and

- updating the user interface displayed on the second computer in response to the user interface update (see Figure 8; Column 6: 39-41, "Clicking on the "Hardware Management Console Application Tasks" of FIG. 6 causes the screen shown in FIG. 8 to be displayed.").

As per Claim 18, the rejection of Claim 1 is incorporated; and Nichols et al. further disclose:

- wherein said specifying the graphical program comprises providing a uniform resource locator (URL) (see Column 3: 7-12, "A user logs on to the Internet in a conventional manner by entering the address or uniform resource locator (URL) to connect to the secure HTTP server ...").

As per Claim 19, the rejection of Claim 1 is incorporated; and Nichols et al. further disclose:

- displaying information indicating a plurality of graphical programs on the first computer (see Figure 9);
- wherein, in specifying the graphical program on the first computer, the user input selects the graphical program from the plurality of graphical programs (see Column 6: 62-67, "... clicking on a CPC of FIG. 9 loads a screen to the browser showing more detailed information useful to the operator ...").

As per Claim 20, the rejection of Claim 19 is incorporated; and Nichols et al. further disclose:

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- wherein said displaying information indicating a plurality of graphical programs on

the first computer comprises displaying a list of the plurality of graphical programs on the first

computer (see Figure 9); and

- wherein, in specifying the graphical program on the first computer, the user input

selects the graphical program from the list of the plurality of graphical programs (see Column 6:

62-67, "... clicking on a CPC of FIG. 9 loads a screen to the browser showing more detailed

information useful to the operator ...").

As per Claim 26, the rejection of Claim 1 is incorporated; and Nichols et al. further

disclose:

- wherein the graphical program comprises a graphical execution flow program (see

Figures 6-16).

As per Claim 27, the rejection of Claim 1 is incorporated; and Nichols et al. further

disclose:

wherein the graphical program implements a virtual instrument (see Figure 8); and

- wherein the user interface of the graphical program comprises a front panel of a

virtual instrument (see Figure 8).

As per Claim 28, Nichols et al. disclose:

- a first computer including a processor coupled to a memory, wherein the first

computer is operable to couple to a network (see Figure 2: 8 and 20);

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- a graphical program stored in the memory of the first computer, wherein the graphical program comprises a plurality of interconnected function icons representing graphical data flow of a desired function (see Figure 2: 4; Figure 9; Column 4: 40-46, "The computer processors or devices to be controlled 22 are represented on the Web browser 4 via objects or icons where the background color of the icons are used to convey the operating state of the device."); and

- a second computer operable to couple to the network, wherein the second computer includes a display (see Figure 2: 4 and 8);
- wherein the second computer is operable to receive user input specifying the graphical program on the first computer (see Column 3: 7-12, "A user logs on to the Internet in a conventional manner by entering the address or uniform resource locator (URL) to connect to the secure HTTP server at which point additional security such as a password will be required. Upon entry of a correct password the Hardware Management Console (HMC) home-page will be displayed.");
- wherein the first computer is operable to execute the graphical program and is operable to provide information describing a user interface of the graphical program over the network to the second computer during said executing (see Column 4: 23-26, "... a computing facility 21 comprising, for example, a mainframe computer system 22, comprising one or more CPCs, is operated from a local Hardware Management Console (HMC) in a central control room 24."; Column 5: 59-62, "At Box 32, the server builds an HTML response for the browser, using the information from the internal message returned from Box 31 and the response is sent to the browser at box 34.");

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- wherein the second computer is operable to receive the information describing the user interface and display the user interface of the graphical program in response to said providing (see Column 5: 62-65, "The browser displays the data from the server on a computer screen at box 35 whereupon the user can click on a displayed icon or action button to initiate another browser request to the server at box 36."); and

- wherein the user interface facilitates interaction between a user of the second computer and the graphical program executing on the first computer (see Column 5: 62-65, "The browser displays the data from the server on a computer screen at box 35 whereupon the user can click on a displayed icon or action button to initiate another browser request to the server at box 36.").

As per Claim 29, the rejection of Claim 28 is incorporated; and Nichols et al. further disclose:

- wherein the second computer is operable to connect to the first computer over the network using the user input that specifies the graphical program on the first computer (see Column 3: 7-12, "A user logs on to the Internet in a conventional manner by entering the address or uniform resource locator (URL) to connect to the secure HTTP server ...").

As per Claim 30, the rejection of Claim 29 is incorporated; and Nichols et al. further disclose:

- wherein the first computer is operable to launch execution of the graphical program in response to the second computer connecting to the first computer (see Column 4: 23-26, "... a

computing facility 21 comprising, for example, a mainframe computer system 22, comprising one or more CPCs, is operated from a local Hardware Management Console (HMC) in a central control room 24.").

As per Claim 31, the rejection of Claim 29 is incorporated; and Nichols et al. further disclose:

- wherein said user input comprises a uniform resource locator (URL) (see Column 3: 7-12, "A user logs on to the Internet in a conventional manner by entering the address or uniform resource locator (URL) to connect to the secure HTTP server ...").

As per Claim 32, the rejection of Claim 31 is incorporated; and Nichols et al. further disclose:

- wherein the URL specifies one or more of: the first computer or the graphical program on the first computer (see Column 3: 7-12, "A user logs on to the Internet in a conventional manner by entering the address or uniform resource locator (URL) to connect to the secure HTTP server ...").

As per Claim 33, the rejection of Claim 28 is incorporated; and Nichols et al. further disclose:

- wherein the network is the Internet (see Figure 2: 8).

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As per Claim 34, the rejection of Claim 28 is incorporated; and Nichols et al. further disclose:

- wherein the second computer stores a web browser, wherein the web browser is executable on the second computer to display the user interface of the graphical program on the second computer (see Column 4: 30-36, "... a client 4 running a standard Web Browser can logon to a secure server 20 in order to monitor and control a remote computing device 22 ...").

As per Claim 35, the rejection of Claim 28 is incorporated; and Nichols et al. further disclose:

- wherein the second computer is operable to receive user input to the graphical program via the displayed user interface on the second computer (see Column 6: 28-38, "Clicking on either one of these choices or icons prompts a security screen shown in FIG. 7 to be displayed.");
- wherein the second computer is operable to provide the user input to the first computer (see Column 6: 28-38, "Upon entry of a correct user name and password, the secure server will build and send the appropriate response screen to the browser."); and
- wherein the graphical program executing on the first computer is operable to respond to the user input (see Column 6: 28-38, "Upon entry of a correct user name and password, the secure server will build and send the appropriate response screen to the browser.").

As per Claim 36, the rejection of Claim 28 is incorporated; and Nichols et al. further disclose:

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- wherein the graphical program is executable to produce a first output state (see Column 6: 28-38, "Upon entry of a correct user name and password, the secure server will build and send the appropriate response screen to the browser."); and

- wherein the second computer is operable to display the first output state in the user interface (see Figure 6; Column 6: 28-38, "Upon entry of a correct user name and password, the secure server will build and send the appropriate response screen to the browser.").

As per Claim 37, the rejection of Claim 36 is incorporated; and Nichols et al. further disclose:

- wherein the graphical program is executable to produce a second output state after the graphical program produces the first output state (see Column 6: 39-41, "Clicking on the "Hardware Management Console Application Tasks" of FIG. 6 causes the screen shown in FIG. 8 to be displayed.");
- wherein the first computer is operable to provide a user interface update indicating the second output state (see Column 6: 39-41, "Clicking on the "Hardware Management Console Application Tasks" of FIG. 6 causes the screen shown in FIG. 8 to be displayed."); and
- wherein the second computer is operable to update the user interface displayed on the second computer in response to the user interface update (see Figure 8; Column 6: 39-41, "Clicking on the "Hardware Management Console Application Tasks" of FIG. 6 causes the screen shown in FIG. 8 to be displayed.").

As per Claim 45, the rejection of Claim 28 is incorporated; and Nichols et al. further disclose:

- wherein the graphical program comprises a graphical execution flow program (see Figures 6-16).

As per Claim 46, the rejection of Claim 28 is incorporated; and Nichols et al. further disclose:

- wherein the graphical program implements a virtual instrument (see Figure 8); and
- wherein the user interface of the graphical program comprises a front panel of the virtual instrument (see Figure 8).

As per Claim 47, the rejection of Claim 28 is incorporated; and Nichols et al. further disclose:

- a plurality of second computers each operable to couple to the network, wherein each of the plurality of second computers includes a display (see Figure 2);
- wherein the first computer is operable to execute the graphical program and is operable to provide information describing a user interface of the graphical program over the network to each of the plurality of second computers during said executing (see Column 5: 59-62, "At Box 32, the server builds an HTML response for the browser, using the information from the internal message returned from Box 31 and the response is sent to the browser at box 34."); and

- wherein each of the plurality of second computers is operable to receive the information describing the user interface and display the user interface of the graphical program in response to said providing (see Column 5: 62-65, "The browser displays the data from the server on a computer screen at box 35 whereupon the user can click on a displayed icon or action button to initiate another browser request to the server at box 36.").

As per Claim 48, the rejection of Claim 28 is incorporated; and Nichols et al. further disclose:

- wherein the graphical program is executable to perform a measurement or automation function (see Figure 6).

As per Claim 49, the rejection of Claim 28 is incorporated; and Nichols et al. further disclose:

- wherein the second computer is operable to display information indicating a plurality of graphical programs on the first computer (see Figure 9); and
- wherein, in specifying the graphical program on the first computer, the user input selects the graphical program from the plurality of graphical programs (see Column 6: 62-67, "... clicking on a CPC of FIG. 9 loads a screen to the browser showing more detailed information useful to the operator ...").

As per Claim 50, the rejection of Claim 49 is incorporated; and Nichols et al. further disclose:

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- wherein, in displaying information indicating a plurality of graphical programs on the first computer, the second computer is operable to display a list of the plurality of graphical programs on the first computer (see Figure 9); and

- wherein, in specifying the graphical program on the first computer, the user input selects the graphical program from the list of the plurality of graphical programs (see Column 6: 62-67, "... clicking on a CPC of FIG. 9 loads a screen to the browser showing more detailed information useful to the operator ...").

As per Claim 51, Nichols et al. disclose:

- establish a network connection with client software (see Column 3: 7-12, "A user logs on to the Internet in a conventional manner ...");
- receive user input from the client software specifying a graphical program for execution (see Column 3: 7-12, "A user logs on to the Internet in a conventional manner by entering the address or uniform resource locator (URL) to connect to the secure HTTP server at which point additional security such as a password will be required. Upon entry of a correct password the Hardware Management Console (HMC) home-page will be displayed.");
- execute the graphical program, wherein the graphical program comprises a plurality of interconnected function icons representing graphical data flow of a desired function (see Column 4: 23-26, "... a computing facility 21 comprising, for example, a mainframe computer system 22, comprising one or more CPCs, is operated from a local Hardware Management Console (HMC) in a central control room 24."); and

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- send information describing a user interface of the graphical program over a network to the client software after establishing the network connection with the client software (see Column 5: 59-62, "At Box 32, the server builds an HTML response for the browser, using the information from the internal message returned from Box 31 and the response is sent to the browser at box 34.");

- wherein the user interface is operable to facilitate interaction between a user and the graphical program over a network (see Column 5: 62-65, "The browser displays the data from the server on a computer screen at box 35 whereupon the user can click on a displayed icon or action button to initiate another browser request to the server at box 36.").

As per Claim 52, the rejection of Claim 51 is incorporated; and Nichols et al. further disclose:

- display information indicating a plurality of graphical programs (see Figure 9); and
- wherein, in specifying the graphical program for execution, the user input selects the graphical program from the plurality of graphical programs (see Column 6: 62-67, "... clicking on a CPC of FIG. 9 loads a screen to the browser showing more detailed information useful to the operator ...").

As per Claim 53, the rejection of Claim 52 is incorporated; and Nichols et al. further disclose:

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- wherein, in displaying information indicating a plurality of graphical programs on a first computer, a second computer is operable to display a list of the plurality of graphical programs on a first computer (see Figure 9); and

- wherein, in specifying the graphical program on a first computer, the user input selects the graphical program from the list of the plurality of graphical programs (see Column 6: 62-67, "... clicking on a CPC of FIG. 9 loads a screen to the browser showing more detailed information useful to the operator ...").

As per Claim 54, the rejection of Claim 51 is incorporated; and Nichols et al. further disclose:

- receive user input to the graphical program from the client software (see Column 6: 28-38, "Clicking on either one of these choices or icons prompts a security screen shown in FIG. 7 to be displayed."); and
- provide the user input to the graphical program (see Column 6: 28-38, "Upon entry of a correct user name and password, the secure server will build and send the appropriate response screen to the browser.");
- wherein the graphical program is operable to respond to the user input (see Column 6: 28-38, "Upon entry of a correct user name and password, the secure server will build and send the appropriate response screen to the browser.").

As per Claim 55, the rejection of Claim 51 is incorporated; and Nichols et al. further disclose:

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- wherein the graphical program produces a first output state (see Column 6: 28-38, "Upon entry of a correct user name and password, the secure server will build and send the appropriate response screen to the browser."); and

- wherein said sending information describing a user interface of the graphical program comprises sending information indicative of the first output state (see Figure 6; Column 6: 28-38, "Upon entry of a correct user name and password, the secure server will build and send the appropriate response screen to the browser.").

As per Claim 56, the rejection of Claim 55 is incorporated; and Nichols et al. further disclose:

- wherein the graphical program produces a second output state after the graphical program produces the first output state (see Column 6: 39-41, "Clicking on the "Hardware Management Console Application Tasks" of FIG. 6 causes the screen shown in FIG. 8 to be displayed."); and
- wherein the memory medium further comprises program instructions executable to send a user interface update indicating the second output state to the client software (see Figure 8; Column 6: 39-41, "Clicking on the "Hardware Management Console Application Tasks" of FIG. 6 causes the screen shown in FIG. 8 to be displayed.").

As per Claim 58, the rejection of Claim 51 is incorporated; and Nichols et al. further disclose:

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- establish a network connection with client software associated with a plurality of client computer systems (see Figure 2; Column 3: 7-12, "A user logs on to the Internet in a conventional manner ..."); and

- send information describing a user interface of the graphical program over a network to the client software of each of the plurality of client computer systems after establishing the network connection with the client software of each of the plurality of client computer systems (see Column 5: 59-62, "At Box 32, the server builds an HTML response for the browser, using the information from the internal message returned from Box 31 and the response is sent to the browser at box 34.").

Claim Rejections - 35 USC § 103

- 11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 12. Claims 16, 17, 21-25, 38-44, and 57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nichols et al. (US 6,138,150) in view of Kodosky et al. (US 4,901,221).

As per Claim 16, the rejection of Claim 1 is incorporated; however, Nichols et al. do not disclose:

- providing information regarding a block diagram of the graphical program; and

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- displaying the block diagram on the second computer, using the information regarding the block diagram.

Kodosky et al. disclose:

- providing information regarding a block diagram of the graphical program (see

 Column 14: 55-58, "FIGS. 20a-l illustrate computer screen displays during each successive step

 in a construction of an exemplary block diagram using a block diagram editor such as that of

 FIGS. 2 or 4."); and
- displaying the block diagram on the second computer, using the information regarding the block diagram (see Figure 22; Column 17: 15-21, "FIG. 22 shows a drawing of a computer-generated display of a completed block diagram for the design example of FIG. 21.

 This block diagram is the graphical program representing the instrument's operation.").

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of <u>Kodosky et al.</u> into the teaching of <u>Nichols et al.</u> to include providing information regarding a block diagram of the graphical program; and displaying the block diagram on the second computer, using the information regarding the block diagram. The modification would be obvious because one of ordinary skill in the art would be motivated to introduce parallelism into a computer system, which usually increases the speed and efficiency of the system (see <u>Kodosky et al.</u> – Column 3: 22-25).

As per Claim 17, the rejection of Claim 16 is incorporated; and Nichols et al. further disclose:

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- providing the user input specifying the edit to the first computer (see Column 7: 27-30, "... the refresh period is settable by the user so that it can be tailored to the environment and usual response time.");

- wherein the first computer is operable to edit the graphical program according to the user input specifying the edit (see Column 7: 30-33, "The secure server remembers the refresh rate setting by userid and IP address so that a user can customize refresh rate based on both office and home connections.").

However, Nichols et al. do not disclose:

- receiving user input specifying an edit to the block diagram.

Kodosky et al. disclose:

- receiving user input specifying an edit to the block diagram (see Column 18: 47-51, "FIG. 25 shows the EDIT menu selections ... CLEAR is useful for removing items from the active window, e.g., selected wires and structures from the block diagram window, or controls from the front panel window.").

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of <u>Kodosky et al.</u> into the teaching of <u>Nichols et al.</u> to include receiving user input specifying an edit to the block diagram. The modification would be obvious because one of ordinary skill in the art would be motivated to provide more efficient means for implementing instrumentation systems (see <u>Kodosky et al.</u> – Column 2: 21-23).

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As per Claim 21, the rejection of Claim 1 is incorporated; however, Nichols et al. do not disclose:

- wherein the graphical program includes a block diagram portion and a user interface portion; and
- wherein said executing the graphical program on the first computer comprises executing the block diagram portion of the graphical program on the first computer.

Kodosky et al. disclose:

- wherein the graphical program includes a block diagram portion and a user interface portion (see Figure 3: 40); and
- wherein said executing the graphical program on the first computer comprises executing the block diagram portion of the graphical program on the first computer (see Column 17: 63-68, "To execute the instrument, the user simply configures the input controls and "clicks" the GO button on the top of the screen ...").

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Kodosky et al. into the teaching of Nichols et al. to include wherein the graphical program includes a block diagram portion and a user interface portion; and wherein said executing the graphical program on the first computer comprises executing the block diagram portion of the graphical program on the first computer. The modification would be obvious because one of ordinary skill in the art would be motivated to provide more efficient means for implementing instrumentation systems (see Kodosky et al. – Column 2: 21-23).

As per Claim 22, the rejection of Claim 21 is incorporated; however, Nichols et al. do not disclose:

- wherein the user interface of the graphical program comprises at least one input variable icon for providing inputs to a block diagram and at least one output variable icon for displaying outputs produced by a block diagram.

Kodosky et al. disclose:

- wherein the user interface of the graphical program comprises at least one input variable icon for providing inputs to a block diagram and at least one output variable icon for displaying outputs produced by a block diagram (see Column 8: 13-19, "The virtual instrument 40 also includes a block diagram 46 which graphically provides a visual representation of a procedure by which a specified value for an input variable displayed in the front panel 42 can produce a corresponding value for an output variable in the front panel 42.").

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of <u>Kodosky et al.</u> into the teaching of <u>Nichols et al.</u> to include wherein the user interface of the graphical program comprises at least one input variable icon for providing inputs to a block diagram and at least one output variable icon for displaying outputs produced by a block diagram. The modification would be obvious because one of ordinary skill in the art would be motivated to introduce parallelism into a computer system, which usually increases the speed and efficiency of the system (see <u>Kodosky et al.</u> – *Column 3: 22-25*).

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As per Claim 23, the rejection of Claim 22 is incorporated; however, Nichols et al. do not disclose:

- the user manipulating inputs of at least one input variable on the second computer;
- providing inputs of at least one input variable to the first computer;
- the block diagram executing using the inputs of at least one input variable on the second computer;
 - the block diagram generating an output of at least one output variable;
 - providing the output of at least one output variable to the second computer; and
 - displaying the output of at least one output variable on the second computer.

Kodosky et al. disclose:

- the user manipulating inputs of at least one input variable on the second computer (see Column 8: 52-53, "FIG. 5 shows a circular turn-dial and a slide switch for setting input variable data.");
- providing inputs of at least one input variable to the first computer (see Column 8: 52-53, "FIG. 5 shows a circular turn-dial and a slide switch for setting input variable data.");
- the block diagram executing using the inputs of at least one input variable on the second computer (see Column 13: 47-55, "... execution instructions can be constructed by constructing a visual display in which at least one input variable produces at least output variable according to a displayed procedure.");
- the block diagram generating an output of at least one output variable (see Column 13: 47-55, "... execution instructions can be constructed by constructing a visual display in

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which at least one input variable produces at least output variable according to a displayed procedure.");

- providing the output of at least one output variable to the second computer (see

Column 13: 47-55, "... the execution instructions are constructed such that, when a value is

assigned to a particular input variable, a value for a corresponding output variable is produced

substantially according to the procedure illustrated in the visual display."); and

- displaying the output of at least one output variable on the second computer (see Column 13: 47-55, "... the execution instructions are constructed such that, when a value is assigned to a particular input variable, a value for a corresponding output variable is produced substantially according to the procedure illustrated in the visual display.").

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Kodosky et al. into the teaching of Nichols et al. to include the user manipulating inputs of at least one input variable on the second computer; providing inputs of at least one input variable to the first computer; the block diagram executing using the inputs of at least one input variable on the second computer; the block diagram generating an output of at least one output variable; providing the output of at least one output variable to the second computer; and displaying the output of at least one output variable on the second computer. The modification would be obvious because one of ordinary skill in the art would be motivated to introduce parallelism into a computer system, which usually increases the speed and efficiency of the system (see Kodosky et al. – Column 3: 22-25).

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As per Claim 24, the rejection of Claim 1 is incorporated; however, Nichols et al. do not disclose:

- wherein the graphical program comprises a graphical data flow program.

Kodosky et al. disclose:

- wherein the graphical program comprises a graphical data flow program (see Column 9: 33-36, "The structures represented in FIGS. 8-12 substantially facilitate the application of data flow programming techniques which are used in the preferred embodiments of the present invention.").

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of <u>Kodosky et al.</u> into the teaching of <u>Nichols et al.</u> to include wherein the graphical program comprises a graphical data flow program. The modification would be obvious because one of ordinary skill in the art would be motivated to introduce parallelism into a computer system, which usually increases the speed and efficiency of the system (see <u>Kodosky et al.</u> – Column 3: 22-25).

As per Claim 25, the rejection of Claim 1 is incorporated; however, Nichols et al. do not disclose:

- wherein the graphical program comprises a graphical control flow program.

Kodosky et al. disclose:

- wherein the graphical program comprises a graphical control flow program (see Column 9: 36-42, "FIG. 8 illustrates a sequence structure. FIG. 9 illustrates an iterative loop structure. FIG. 10 illustrates a conditional structure ...").

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of <u>Kodosky et al.</u> into the teaching of <u>Nichols et al.</u> to include wherein the graphical program comprises a graphical control flow program. The modification would be obvious because one of ordinary skill in the art would be motivated to introduce parallelism into a computer system, which usually increases the speed and efficiency of the system (see <u>Kodosky et al.</u> – Column 3: 22-25).

As per Claim 38, the rejection of Claim 28 is incorporated; however, Nichols et al. do not disclose:

- wherein the first computer is operable to provide information regarding a block diagram associated with the graphical program; and
- wherein the second computer is operable to display the block diagram on the display of the second computer, using the information regarding the block diagram.

Kodosky et al. disclose:

- wherein the first computer is operable to provide information regarding a block diagram associated with the graphical program (see Column 14: 55-58, "FIGS. 20a-l illustrate computer screen displays during each successive step in a construction of an exemplary block diagram using a block diagram editor such as that of FIGS. 2 or 4."); and
- wherein the second computer is operable to display the block diagram on the display of the second computer, using the information regarding the block diagram (see Figure 22; Column 17: 15-21, "FIG. 22 shows a drawing of a computer-generated display of a completed

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block diagram for the design example of FIG. 21. This block diagram is the graphical program representing the instrument's operation.").

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of <u>Kodosky et al.</u> into the teaching of <u>Nichols et al.</u> to include wherein the first computer is operable to provide information regarding a block diagram associated with the graphical program; and wherein the second computer is operable to display the block diagram on the display of the second computer, using the information regarding the block diagram. The modification would be obvious because one of ordinary skill in the art would be motivated to introduce parallelism into a computer system, which usually increases the speed and efficiency of the system (see <u>Kodosky et al.</u> – Column 3: 22-25).

As per Claim 39, the rejection of Claim 38 is incorporated; and Nichols et al. further disclose:

- wherein the second computer is operable to provide the user input specifying the edit to the first computer (see Column 7: 27-30, "... the refresh period is settable by the user so that it can be tailored to the environment and usual response time."); and
- wherein the first computer is operable to edit the graphical program according to the user input specifying the edit (see Column 7: 30-33, "The secure server remembers the refresh rate setting by userid and IP address so that a user can customize refresh rate based on both office and home connections.").

However, Nichols et al. do not disclose:

- wherein the second computer is operable to receive user input specifying an edit to

the block diagram.

Kodosky et al. disclose:

- wherein the second computer is operable to receive user input specifying an edit to

the block diagram (see Column 18: 47-51, "FIG. 25 shows the EDIT menu selections ... CLEAR

is useful for removing items from the active window, e.g., selected wires and structures from the

block diagram window, or controls from the front panel window.").

Therefore, it would have been obvious to one of ordinary skill in the art at the time the

invention was made to incorporate the teaching of Kodosky et al. into the teaching of Nichols et

al. to include wherein the second computer is operable to receive user input specifying an edit to

the block diagram. The modification would be obvious because one of ordinary skill in the art

would be motivated to provide more efficient means for implementing instrumentation systems

(see Kodosky et al. – Column 2: 21-23).

As per Claim 40, the rejection of Claim 28 is incorporated; however, Nichols et al. do

not disclose:

- wherein the graphical program includes a diagram portion and a user interface

portion; and

- wherein the first computer is operable to execute the diagram portion of the graphical

program.

Kodosky et al. disclose:

- wherein the graphical program includes a diagram portion and a user interface portion (see Figure 3: 40); and

- wherein the first computer is operable to execute the diagram portion of the graphical program (see Column 17: 63-68, "To execute the instrument, the user simply configures the input controls and "clicks" the GO button on the top of the screen ...").

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Kodosky et al. into the teaching of Nichols et al. to include wherein the graphical program includes a diagram portion and a user interface portion; and wherein the first computer is operable to execute the diagram portion of the graphical program. The modification would be obvious because one of ordinary skill in the art would be motivated to provide more efficient means for implementing instrumentation systems (see Kodosky et al. – Column 2: 21-23).

As per Claim 41, the rejection of Claim 28 is incorporated; however, Nichols et al. do not disclose:

- wherein the user interface of the graphical program comprises at least one input variable icon for providing inputs to a block diagram and at least one output variable icon for displaying outputs produced by a block diagram.

Kodosky et al. disclose:

- wherein the user interface of the graphical program comprises at least one input variable icon for providing inputs to a block diagram and at least one output variable icon for displaying outputs produced by a block diagram (see Column 8: 13-19, "The virtual instrument

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40 also includes a block diagram 46 which graphically provides a visual representation of a procedure by which a specified value for an input variable displayed in the front panel 42 can produce a corresponding value for an output variable in the front panel 42.").

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of <u>Kodosky et al.</u> into the teaching of <u>Nichols et al.</u> to include wherein the user interface of the graphical program comprises at least one input variable icon for providing inputs to a block diagram and at least one output variable icon for displaying outputs produced by a block diagram. The modification would be obvious because one of ordinary skill in the art would be motivated to introduce parallelism into a computer system, which usually increases the speed and efficiency of the system (see <u>Kodosky et al.</u> – *Column 3: 22-25*).

As per Claim 42, the rejection of Claim 41 is incorporated; however, Nichols et al. do not disclose:

- wherein the second computer is operable to receive user input manipulating inputs of at least one input variable on the second computer;
 - wherein the first computer is operable to receive inputs of at least one input variable;
- wherein the block diagram is operable to execute using the inputs of at least one input variable on the second computer;
- wherein the block diagram is operable to generate an output of at least one output variable;

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- wherein the second computer is operable to receive the output of at least one output variable; and

- wherein the second computer is operable to display the output of at least one output variable.

Kodosky et al. disclose:

- wherein the second computer is operable to receive user input manipulating inputs of at least one input variable on the second computer (see Column 8: 52-53, "FIG. 5 shows a circular turn-dial and a slide switch for setting input variable data.");
- wherein the first computer is operable to receive inputs of at least one input variable (see Column 8: 52-53, "FIG. 5 shows a circular turn-dial and a slide switch for setting input variable data.");
- wherein the block diagram is operable to execute using the inputs of at least one input variable on the second computer (see Column 13: 47-55, "... execution instructions can be constructed by constructing a visual display in which at least one input variable produces at least output variable according to a displayed procedure.");
- wherein the second computer is operable to receive the output of at least one output variable (see Column 13: 47-55, "... execution instructions can be constructed by constructing a visual display in which at least one input variable produces at least output variable according to a displayed procedure.");
- wherein the second computer is operable to receive the output of at least one output variable (see Column 13: 47-55, "... the execution instructions are constructed such that, when a

value is assigned to a particular input variable, a value for a corresponding output variable is produced substantially according to the procedure illustrated in the visual display."); and

- wherein the second computer is operable to display the output of at least one output variable (see Column 13: 47-55, "... the execution instructions are constructed such that, when a value is assigned to a particular input variable, a value for a corresponding output variable is produced substantially according to the procedure illustrated in the visual display.").

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Kodosky et al. into the teaching of Nichols et al. to include wherein the second computer is operable to receive user input manipulating inputs of at least one input variable on the second computer; wherein the first computer is operable to receive inputs of at least one input variable; wherein the block diagram is operable to execute using the inputs of at least one input variable on the second computer; wherein the block diagram is operable to generate an output of at least one output variable; wherein the second computer is operable to receive the output of at least one output variable; and wherein the second computer is operable to display the output of at least one output variable. The modification would be obvious because one of ordinary skill in the art would be motivated to introduce parallelism into a computer system, which usually increases the speed and efficiency of the system (see Kodosky et al. – Column 3: 22-25).

As per Claim 43, the rejection of Claim 28 is incorporated; however, Nichols et al. do not disclose:

- wherein the graphical program comprises a graphical data flow program.

Kodosky et al. disclose:

- wherein the graphical program comprises a graphical data flow program (see Column 9: 33-36, "The structures represented in FIGS. 8-12 substantially facilitate the application of data flow programming techniques which are used in the preferred embodiments of the present invention.").

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of <u>Kodosky et al.</u> into the teaching of <u>Nichols et al.</u> to include wherein the graphical program comprises a graphical data flow program. The modification would be obvious because one of ordinary skill in the art would be motivated to introduce parallelism into a computer system, which usually increases the speed and efficiency of the system (see <u>Kodosky et al.</u> – Column 3: 22-25).

As per Claim 44, the rejection of Claim 28 is incorporated; however, Nichols et al. do not disclose:

- wherein the graphical program comprises a graphical control flow program.

Kodosky et al. disclose:

- wherein the graphical program comprises a graphical control flow program (see Column 9: 36-42, "FIG. 8 illustrates a sequence structure. FIG. 9 illustrates an iterative loop structure. FIG. 10 illustrates a conditional structure ...").

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of <u>Kodosky et al.</u> into the teaching of <u>Nichols et</u> al. to include wherein the graphical program comprises a graphical control flow program. The

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modification would be obvious because one of ordinary skill in the art would be motivated to introduce parallelism into a computer system, which usually increases the speed and efficiency of the system (see <u>Kodosky et al.</u> – Column 3: 22-25).

As per Claim 57, the rejection of Claim 51 is incorporated; and Nichols et al. further disclose:

- send information associated with the graphical program to the client software (see Column 5: 59-62, "At Box 32, the server builds an HTML response for the browser, using the information from the internal message returned from Box 31 and the response is sent to the browser at box 34.").

However, Nichols et al. do not disclose:

- information regarding a block diagram.

Kodosky et al. disclose:

- information regarding a block diagram (see Column 14: 55-58, "FIGS. 20a-l illustrate computer screen displays during each successive step in a construction of an exemplary block diagram using a block diagram editor such as that of FIGS. 2 or 4.").

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of <u>Kodosky et al.</u> into the teaching of <u>Nichols et al.</u> to include information regarding a block diagram. The modification would be obvious because one of ordinary skill in the art would be motivated to introduce parallelism into a computer system, which usually increases the speed and efficiency of the system *(see Kodosky et al. – Column 3: 22-25)*.

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Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Qing Chen whose telephone number is 571-270-1071. The Examiner can normally be reached on Monday through Thursday from 7:30 AM to 4:00 PM. The Examiner can also be reached on alternate Fridays.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Wei Zhen, can be reached on 571-272-3708. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the TC 2100 Group receptionist whose telephone number is 571-272-2100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

QC / QC March 12, 2007

WEI ZHEN
SUPERVISORY PATENT EXAMINES